STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



DAVID P. LITTELL

COMMISSIONER

The Lane Construction Corporation dba Wardwell Contracting **Hancock County** Orland, Maine A-287-71-L-R/A

Departmental Findings of Fact and Order **Air Emission License**

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

- 1. The Lane Construction Corporation dba Wardwell Contracting (Lane) has applied to renew their Air Emission License permitting the operation of emission sources associated with their crushed stone and gravel facility.
- 2. Lane has also requested an amendment to their license to remove asphalt plant #16.
- 3. The equipment addressed in this license is based at 14 Earth Plaza, Orland, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Rock Crushers

Equipment	<u>Powered</u>	Process Rate (tons/hr)	<u>Date of</u> <u>Manufacture</u>	Control Device
1165 HR T-Jaw	1165 HR T-Jaw Drive	386	2006	Spray Nozzles
SEC 636 AC	Electric	60	Pre-1973	Spray Nozzles

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Diesel Units

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Equipment		Max. Capacity	Max. Firing Rate	Fuel Type	
	1165 HR T-Jaw Drive	1.9 MMBtu/hr	12 0 cm1/hm	#2 fuel oil,	
			13.8 gal/hr	0.05% S	

C. Application Classification

The application for Lane does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005).

With the removal of the asphalt plant eliminating the use of #2 fuel oil and specification waste oil and thus the attendant fuel use limit, Lane is now a natural minor source.

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

<u>Pollutant</u>	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Sig. Level
PM	14.0	0.2	-13.8	100
PM_{10}	14.0	0.2	-13.8	100
SO_2	35.7	0.18	-35.5	100
NO _x	28.2	4.0	-24.2	100
СО	83.5	2.9	-80.6	100
VOC	2.9	1.2	-1.7	50

This modification is determined to be a minor modification and has been processed as such.

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II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Rock Crushers

The 1165 HR T-Jaw rock crusher is a portable unit manufactured in 2006 and has a rated capacity of 386 tons per hour. This rock crusher is subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after Augusts 31, 1983 with capacities greater than 150 tons per hour for portable plants and greater than 25 tons per hour for non-portable plants. NSPS testing was performed on this unit on June 9, 2008.

The secondary rock crusher, SEC636AC, was manufactured prior to 1973 and has a rated capacity of 60 tons per hour. The secondary crusher is therefore not subject to NSPS Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons per hour for portable plants and greater than 25 tons per hour for non-portable plants.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of BPT for control of PM emissions from the rock crushers, Lane shall control visible emissions to no greater than 10% opacity on a six (6) minute block average. Lane shall maintain water sprays on the rock crushers and operate as needed to control visible emissions.

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C. Diesel Unit

The 1165 HR T-Jaw Diesel was manufactured on September 21, 2005 and is therefore not subject to NSPS Subpart IIII for Stationary compression Ignition Internal Combustion Engines manufactured after April 1, 2006. In addition, it is a portable unit meeting the definition of a nonroad engine and is therefore specifically exempted from the requirements of Subpart IIII. As a nonroad engine, the 1165 HR T-Jaw Diesel may not fire fuel which exceeds a sulfur content of 0.05% (500 ppm) as provided in 40 CFR 80.610(e)(2).

The 1165 HR T-Jaw Diesel is certified by the manufacturer to meet EPA's Tier 2 standards.

A summary of the BPT analysis for the 1165 HR T-Jaw Diesel is the following:

- 1. The total fuel use for the 1165 HR T-Jaw Diesel shall not exceed 50,000 gallons per year of #2 fuel oil with a maximum sulfur content of 0.05% by weight based on a 12-month rolling total.
- 2. The SO2 emissions limits are based on the firing of fuel which meets the criteria in 40 CFR 80.610(e)(2).
- 3. PM, CO and NOx + VOC emission limits are based on EPA Tier 2 emission standards.
- 4. Visible emission from the diesel unit shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

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E. Annual Emissions

Lane shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emissions for the Facility Tons/year

(Used to calculate the annual license fee)

	PM	PM ₁₀	SO_2	NO _x	CO	VOC
165 HR T-Jaw Diesel	0.2	0.2	0.2	4.0	2.9	1.2
TOTAL TYP	0.2	0.2	0.2	4.0	2.9	1.2

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

Pollutant	Tons/Year
PM	25
PM ₁₀	25
SO_2	50
NO_x	100
СО	250

Based on the total facility licensed emissions, Lane is below the emissions level required for modeling and monitoring.

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ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-287-71-L-R/A subject to the following conditions:

<u>Severability</u>. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

request. [06-096 CMR 115]

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(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]

- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

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- 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
- 2. pursuant to any other requirement of this license to perform stack testing.
- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

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- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) Rock Crushers

- A. Lane shall install and maintain spray nozzles for particulate control on the 1165 HR T-Jaw and the SEC 636 AC rock crushers, and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [06-096 CMR 115(BPT) and 06-096 CMR 101].
- B. Lane shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [06-096 CMR 15, BPT]
- C. Lane shall maintain a log detailing and quantifying the hours of operation on a daily basis for the 1165 HR T-Jaw and the SEC 636 AC rock crushers. The operation log shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]
- D. The 1165 HR T-Jaw crusher is subject to 40 CFR Part 60 Subparts A and OOO and Lane shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h).

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(17) **1165 HR T-Jaw Diesel**

- A. Total fuel use for the 1165 HR T-Jaw Diesel shall not exceed 50,000 gallons per calendar year of diesel fuel with a sulfur content not to exceed 0.05% (500 ppm). Compliance shall be based on fuel receipts from the supplier showing the quantity and sulfur content of fuel delivered. Records of annual fuel use shall be kept on a 12-month rolling total basis. [06-096 CMR 15, BPT, 40 CFR 80.610]
- B. Emissions shall not exceed the following [06-096 CMR 115, BACT]

Emission Unit	PM	PM10	SO2	NOx + VOC	CO
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
1165 HR T-Jaw Diesel	0.09	0.09	0.10	2.89	1.58

(18) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(19) Equipment Relocation

A. Lane shall notify the Bureau of Air Quality, by written notification at least 10 days in advance, prior to relocation of any equipment carried on this license. The notification shall be sent to:

Attn: Relocation Notice Maine DEP Bureau of Air Quality 17 State House Station Augusta, ME 04333-0017

The notification shall include the address of the equipment's new location and the license number pertaining to the relocated equipment.

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- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.
- (20) Lane shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 27th DAY OF July

, 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: June P. Hissoner
DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: $\frac{3/11/09}{3/30/09}$

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield, Bureau of Air Quality.

